

## October 2019 Datum Change Information

On October 1, 2019, the California Department of Water Resources (DWR) will change the reporting of river stage data collected at 21 locations in the upper Sacramento River and Feather River area from their current datum, either National Geodetic Vertical Datum 1929 (NGVD29), United States Engineering Datum (USED), or Local Datum to the North American Vertical Datum 1988 (NAVD88) standard. Stage forecasts for the 21 locations will be displayed on CDEC in NGVD29/USED/Local datum until October 1, 2019...where it will then be displayed as NAVD88. The change to NAVD88 will affect the monitor stage and flood stages at 13 stations.

### The new monitor and flood stages effective October 1, 2019:

| Location                                    | New Monitor Stage<br>(feet) NAVD88 | New Flood Stage<br>(feet) NAVD88 | Old Monitor/Flood Stage<br>(feet) |
|---|------------------------------------|----------------------------------|-----------------------------------|
| Sacramento River at Red Bluff Diversion Dam | 252.5                              | 255.5                            | 250 / 253                         |
| Sacramento River at Tehama Bridge           | 206.5                              | 209.5                            | 210 / 213                         |
| Sacramento River at Vina Bridge             | 180.0                              | 183.0                            | 180 / 183                         |
| Sacramento River at Hamilton City           | 142.0                              | 147.0                            | 143 / 148                         |
| Sacramento River at Ord Ferry               | 110.0                              | 114.0                            | 110 / 114                         |
| Sacramento River at Butte City              | 88.5                               | 97.0                             | 89 / 97.2                         |
| Sacramento River at Moulton Weir            | 76.2                               | 83.8                             | 76.8 / 84.4                       |
| Sacramento River at Tisdale Weir            | 44.1                               | 51.6                             | 45.5 / 53                         |
| Sacramento River at Colusa Weir             | 60.9                               | 70.1                             | 61.8 / 71                         |
| Middle Fork Feather River near Portola      | 4851.0                             | 4852.5                           | 7.5 / 9                           |
| Feather River near Gridley                  | 93.5                               | 102.0                            | 95 / 103.8                        |
| Feather River at Yuba City                  | 67.0                               | 82.5                             | 65 / 80.2                         |
| Butte Creek near Durham                     | 190.5                              | 198.0                            | 13 / 20.5                         |

The accuracy of the datum exceeds the accuracy of the forecast model. The forecast model accuracy diminishes below 0.5 feet so for forecast purposes values are rounded to nearest 0.5 feet at non-weir locations.

### National Geodetic Survey (NGS) Adjustments to NAVD88 Survey effective October 1, 2019:

| Station | Transmitted to<br>CDEC | Station Name                                | CDEC ID | Adjustment values to get<br>NAVD88 from old datum<br>values <sup>a</sup> |
|---------|------------------------|---|---------|--|
| A02750  | Y                      | Sacramento River at Red Bluff Diversion Dam | RDB     | 2.6  |
| A02730  | Y                      | Sacramento River at Tehama Bridge           | TEH     | -3.3   |
| A02700  | Y                      | Sacramento River at Vina Bridge             | VIN     | -0.1   |
| A02630  | Y                      | Sacramento River at Hamilton City           | HMC     | -0.8   |
| A02570  | Y                      | Sacramento River at Ord Ferry               | ORD     | -0.2   |
| A02500  | Y                      | Sacramento River at Butte City              | BTC     | -0.5   |
| A02986  | Y                      | Sacramento River at Moulton Weir            | MLW     | -0.6   |
| A02960  | Y                      | Sacramento River at Tisdale Weir            | TIS     | -1.4   |
| A02981  | Y                      | Sacramento River at Colusa Weir             | CLW     | -0.9   |
| A55420  | Y                      | Middle Fork Feather River near Portola      | MFP     | 4843.6   |
| A05165  | Y                      | Feather River near Gridley                  | GRL     | -1.6   |
| A05135  | Y                      | Feather River at Yuba City                  | YUB     | 2.2  |
| A04265  | Y                      | Butte Creek near Durham                     | BCD     | 177.5  |
| A42105  | Y                      | Big Chico Creek near Chico                  | BIC     | 274.3  |
| A02972  | Y                      | Butte Slough near Meridian                  | BSL     | -1.4   |
| A02984  | Y                      | Cherokee Canal near Richvale                | CHC     | 90.5   |
| A54310  | Y                      | Indian Creek below Indian Falls             | ICR     | 3103.2   |
| A55100  | Y                      | Feather River at Merrimac                   | MER     | 1598.3   |
| A05775  | Y                      | South Honcut Creek near Bangor              | SFH     | 615.1  |
| A03500  | Y                      | Thomes Creek at Paskenta                    | THO     | 695.5  |
| A52260  | Y                      | West Branch Feather River near Magalia      | WFR     | 1537.9   |

<sup>a</sup>(old datum value) + (adjustment value) = (NAVD88 value)